UTAH DEPARTMENT OF TRANSPORTATION
TRAFFIC OPERATIONS CENTER
MONTHLY REPORT MAY 2003

2060 South 2760 West, Salt Lake City, UT 84104
Phone: 887-3700 Fax: 887-3797 www.commuterlink.utah.gov

Field Devices Summary

Freeway Closed Circuit Television (CCTV)	163
Surface Street CCTV	32
Dial-up CCTV	35
Total CCTV	**230**
Freeway VMS	42
Surface Street VMS	17
Portable VMS	2
Total VMS	**62**
HAR (6 deployed, 5 portable units)	11
TMS	231
RWIS	52
Connected Traffic Signals	613
Connected Ramp Meters	23

Operations Summary

VMS Messages Displayed	273
Signal Timing Calls	24
Signal Maintenance Calls	204
New Work Orders	326
Incident Responses	457
Website Visitor Sessions	56,864
511 Calls	15,723
Email Alerts Sent	540
CommuterLink Questions	15

TOC Employee of the Month

Cyndy Nelson – DPS Dispatch

The TOC was host to a tour from the Utah Highway Patrol Citizens Academy

KUDOS!

Kudos goes to the signal timing group. Tim Biel of the UDOT materials lab told of a friend who had a complaint about an intersection. The technician called the commuter the following day and reported what the problem was, that it was fixed, and that he should call if he observed the problem again. The caller was impressed that the turnaround was quick and that he received a follow-up call.

TOC Mission

1. To Support UDOT and the Department of Public Safety in Improving Highway Safety.
2. To Help Provide Reliable and Efficient Travel.
3. To Provide Useful and Timely Real-time Traffic Information.
4. To Work Together with Other Government Agencies to Serve the Public.
5. To Provide Excellent Customer Service.

ACTIVITY HIGHLIGHTS

TOC Activities

This Month

1. Adrian Ruiz from DPS hosted a tour for the Utah Highway Patrol Citizens Academy (UHPCA). The group was able to see the operations and capabilities of the TOC, as well as how it greatly aids law enforcement. The group is made up of citizens who take an interest in, and like to be involved in law enforcement. Lieutenant Ostler of the Utah Highway Patrol leads and teaches this group of citizens.

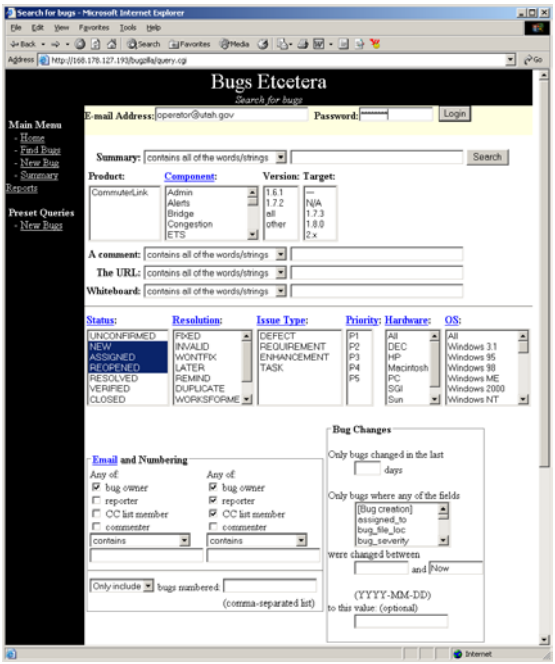
Adrian Ruiz, DPS Manager, presents an overview of the Salt Lake Communications Center to the UHPCA.

2. A group from the Salt Lake International Airport toured the TOC to obtain an understanding of the functionality and operational procedures of the CCTV system. The group was briefed concerning the rules and regulations that govern the use of the system, as well as how the cameras actually operate. The airport also has a large number of CCTV for security purposes, and is currently planning to set up a control room where all of the airport security cameras may be monitored. The group was also very interested to see how the TOC Operators and DPS Dispatchers work closely together.

3. Several of the staff teed off for the annual TOC golf tournament at the Rose Park Golf Course. About 20 people competed in the event. The two man team results were:
   - First Place: Mark Parry and Ritchie Taylor
   - Second Place: Troy Hyer and Joe Perrin
   - Third Place - John Grant and Russ Robertson

   All who attended had a great time.

4. Clint Hutchings and Keith Scholl of TransCore provided training on Bugzilla to the TOC Control Room Staff. Bugzilla will be used at the TOC to track software bugs and enhancements for the CommuterLink Suite of software applications.



Screenshot of Bugzilla.

ATMS Improvement and Expansion Activities

The following is a list of many of the projects that have either been completed, or are currently underway:

Region 1:

- The halfway mark has been passed for fiber optic cable installation along I-15 from Lagoon to Layton. This project will provide a connection from the Region 1 to the TOC.

Horizontal bore machine being used for conduit installation along I-15.

Region 2:

- A contract is in the process of being awarded for the installation and repair of approximately 400 ATMS and traffic loops. These enhancements will improve signal coordination throughout the Salt Lake Valley.
- At various locations along I-15, the ramp meters are being modified to convert from 2 to 3 lane meters or 1 to 2 lane meters. The reconfiguration will consist of the removal of the HOV lane, installation of additional loops and modifications to the existing metering signals. The modification will provide more storage on the ramps during peak periods, which will help prevent backups onto the side street while still providing the benefits of metered onramp flow.

Recently modified southbound ramp meter at I-15 and 4500 South.

Region 3:

- A wireless communication connection is currently being installed that will provide R3 headquarters with full ATMS workstation functionality. In the process, communications will be re-established from 12300 S to the Point of the Mountain (POM) camera, and will also provide communications with other devices including several new cameras throughout Utah County. This connection will serve as the backbone to the TOC and will become the foundation for integrating future Utah Co ATMS devices.

Region 4:

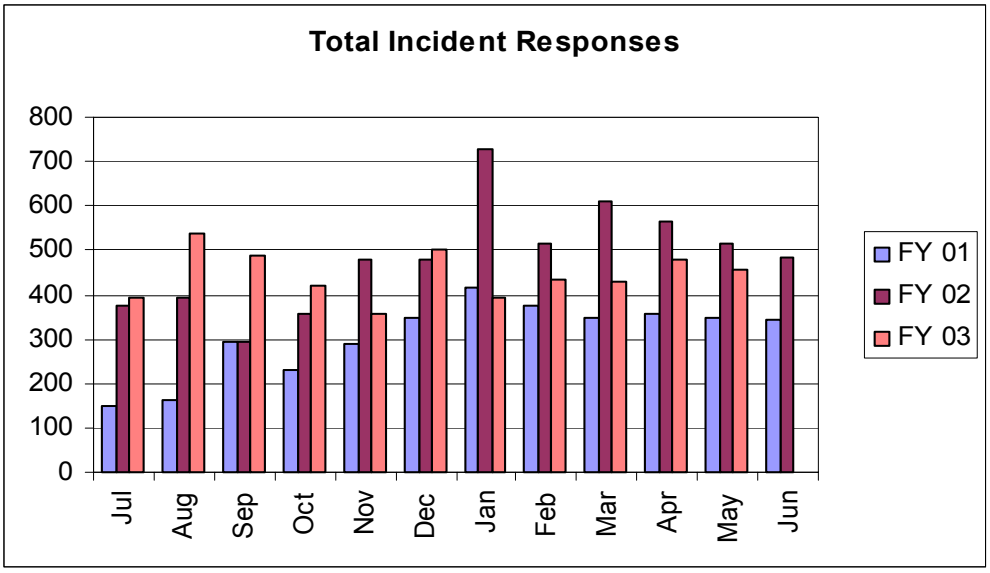
- Five new RWIS sites are being deployed throughout Region 4. Site selection has been completed and purchase orders have been issued for the RWIS equipment. These new RWIS stations will provide much needed atmospheric conditions for forecasting the surrounding areas.

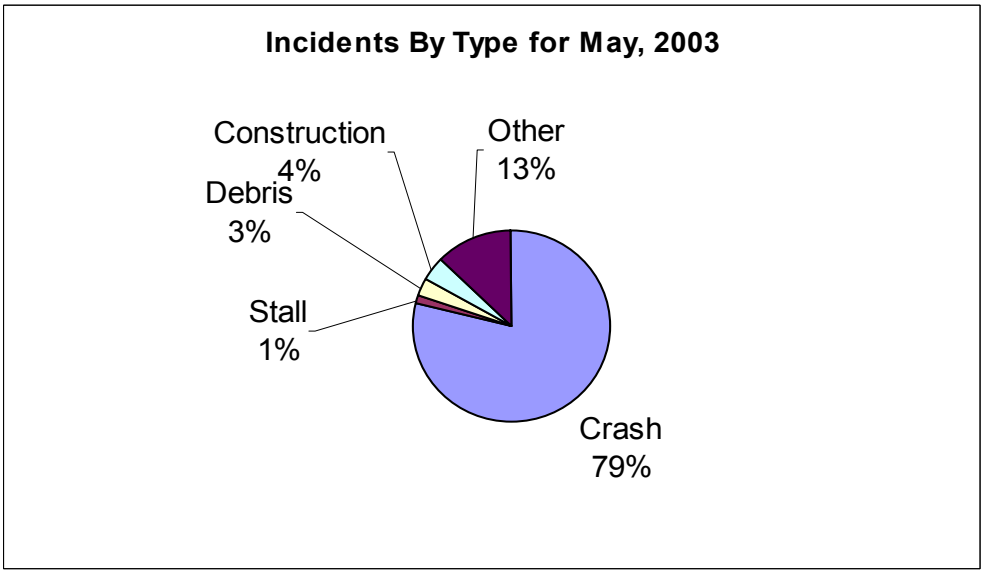
Acronyms

ATMS Advanced Traffic Management System	NTCIP National Transportation Communications for ITS Protocol
CCTV Closed Circuit Television	TMS Traffic Monitoring Station (count station)
DPS Department of Public Safety	TOC Traffic Operations Center
HAR Highway Advisory Radio	TTI Travel Time Index
RWIS Road-Weather Information System	VMS Variable Message Sign

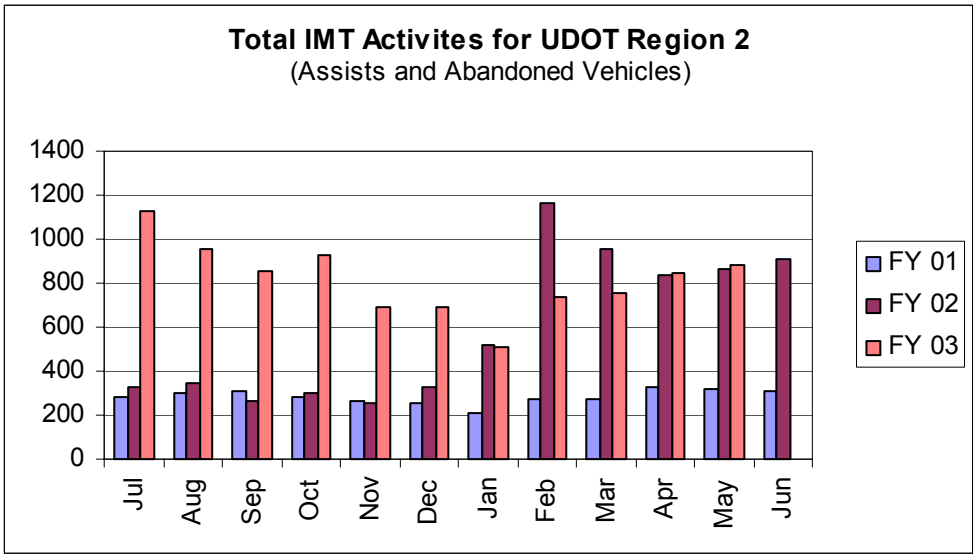
Safety

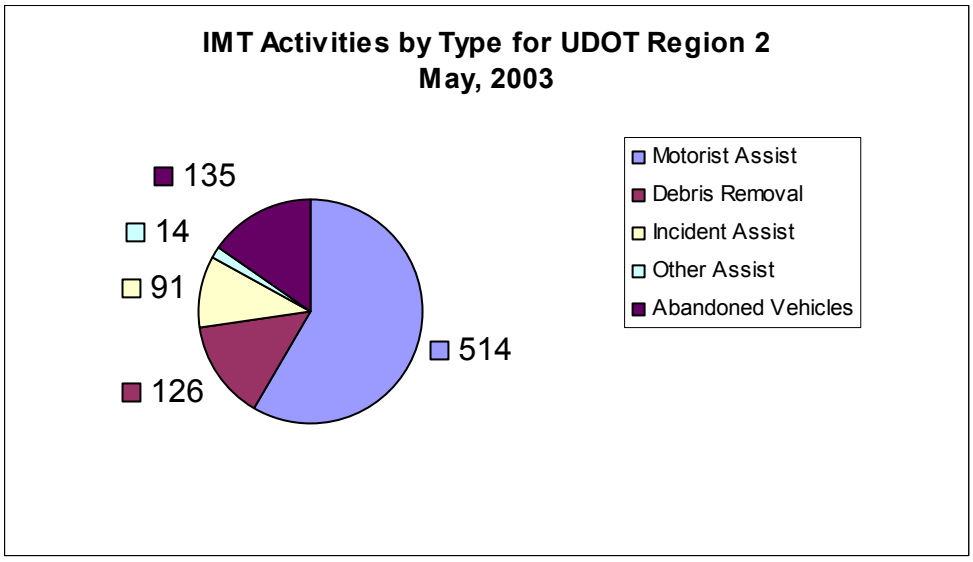
An incident response is an incident recorded in the ATMS system. These can be of several types, including crash, construction, debris, stall, congestion, or other. Each time an incident is created information is sent to the 511 system, the website, and email alerts are generated.





Region 2 Incident Management Team (IMT) Activities





Freeway Flow

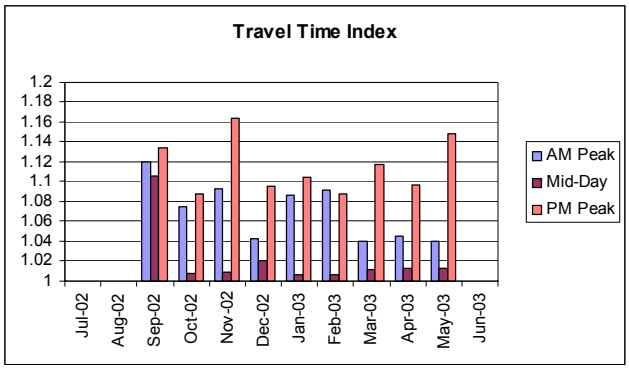
Freeway traffic flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Salt Lake Valley. As more TMS sites are installed throughout the state, they will be included in these performance measures.

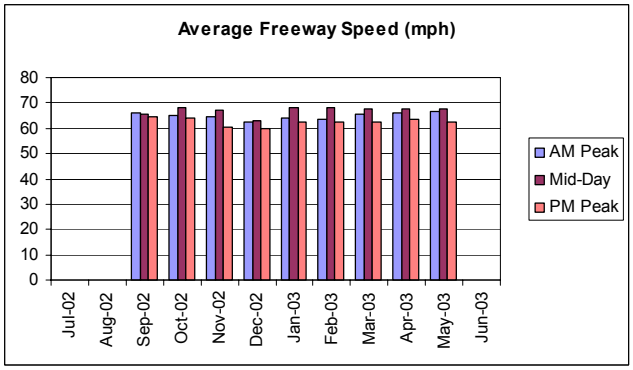
Travel Time Index: This measure of mobility is based on freeway speeds and is weighted by segment lengths and by the traffic volume. A value of one (1) represents free-flow speeds. A value of 1.12 indicates that the average vehicle trip takes 12% longer than if that were the only vehicle on the freeway.

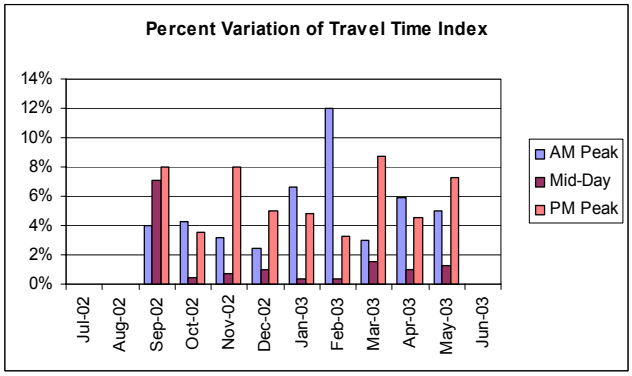
Percent Variation of Travel Time Index: The percent variation in the Travel Time Index is a measure of how much the Travel Time index changes from day-to-day.

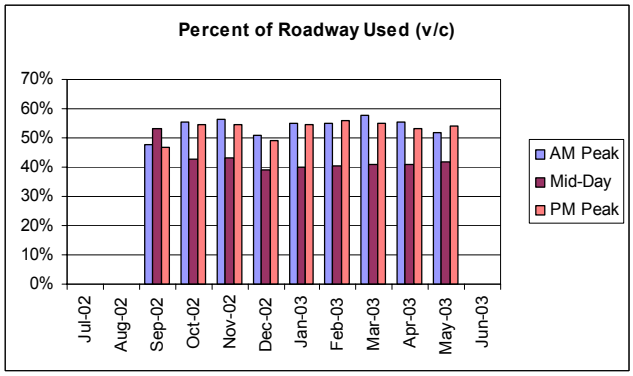
Average Freeway Speed: The Freeway Speed is weighted by volume.

Percent of Roadway Used: The percent of roadway used is the ratio of the volume on the segment to its capacity. This is otherwise known as the volume to capacity ratio, or (v/c).









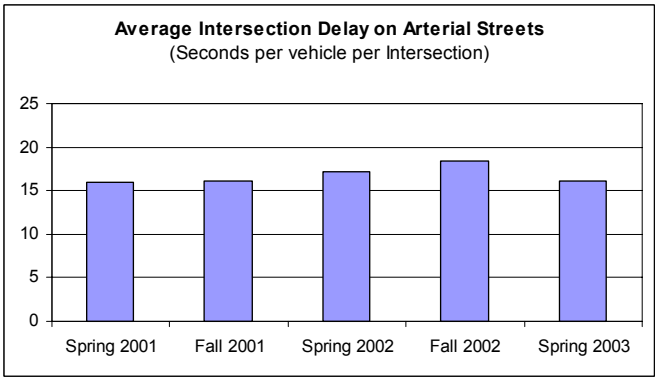
The 5 links with the highest average Travel Time Index for the month are:

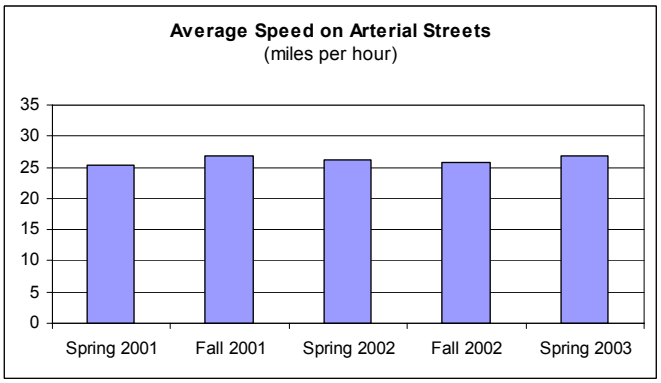
Segment	Period	AvgOfTTI
I-15 NB from 600 N to I-215 W	PM Peak	1.66
SR-201 EB from I-215 W to I-15	PM Peak	1.44
I-15 NB from 600 S to 600 N	PM Peak	1.32
I-80 E EB from I-15 to I-215	PM Peak	1.25
I-215 S WB from Knudsen's Corner to I-15	AM Peak	1.19

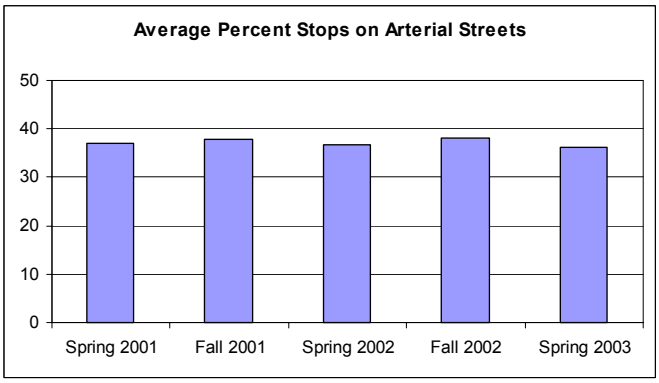
Surface Street Flow

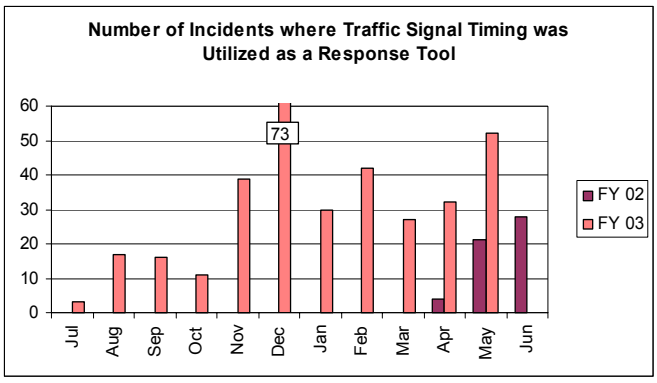
The surface street traffic statistics are generated through a series of Travel Time measurements. Much can be learned through several runs along a corridor, including the average travel time, the average percent of intersections at which a vehicle must stop, the average time stopped at an intersection, and the average speed. The Statewide Timing group gathers these measurements from Regions 1-4 twice each year. The chart in the lower right corner shows the number of incidents where traffic signal timing was modified in order to help traffic flow around closed lanes, or to help relieve excessive congestion.

Measurements have just been completed for spring of 2003 and the resulting Statewide Averages are shown in the charts below.

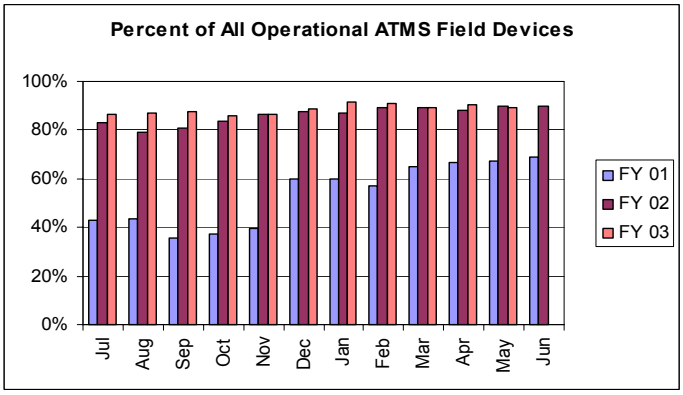


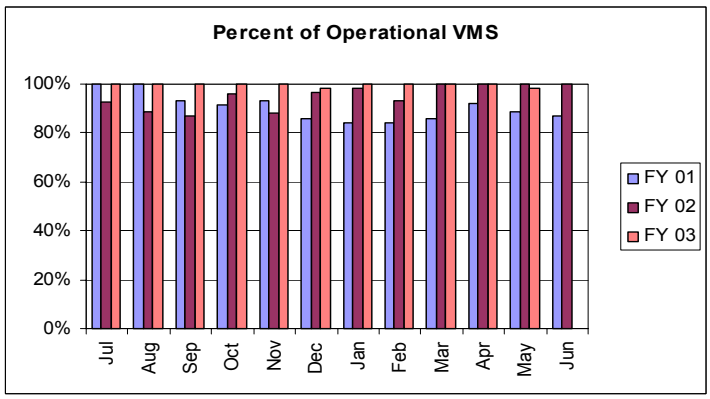


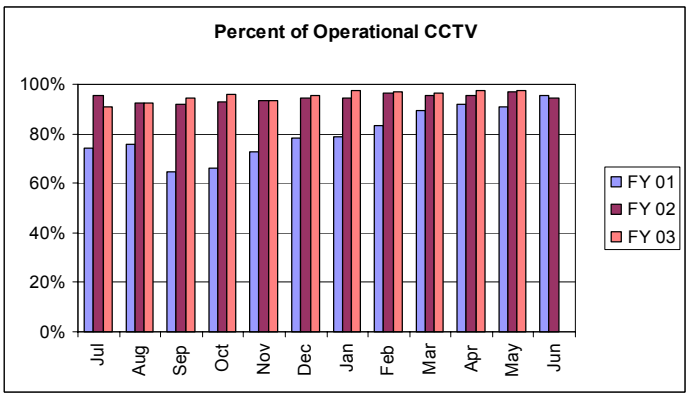


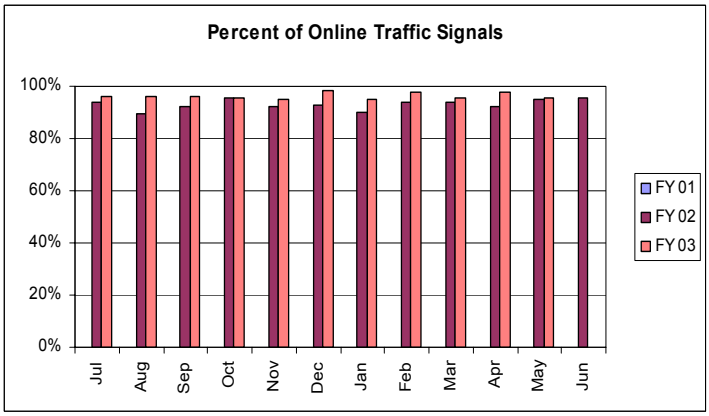


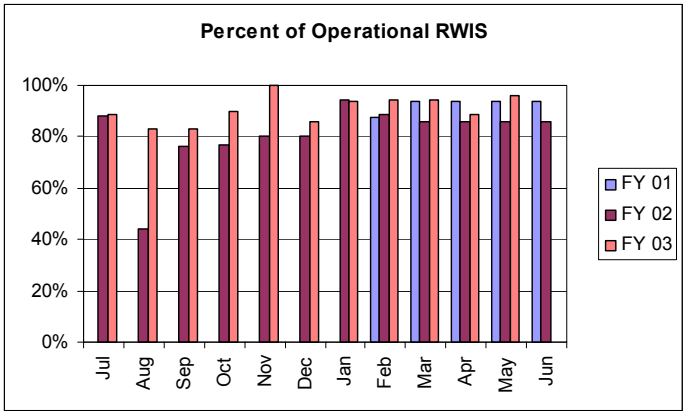
Maintenance

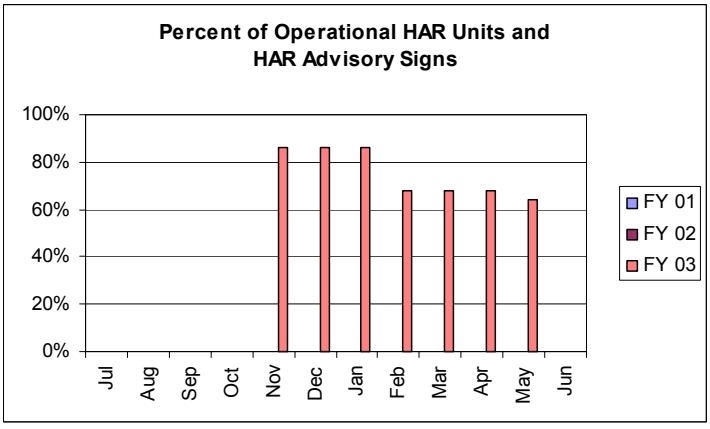


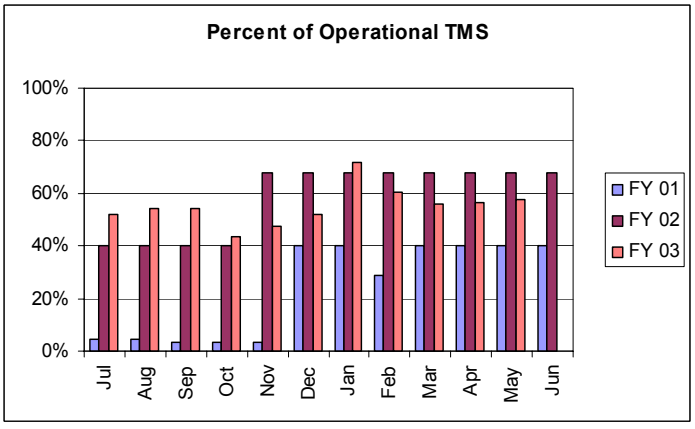




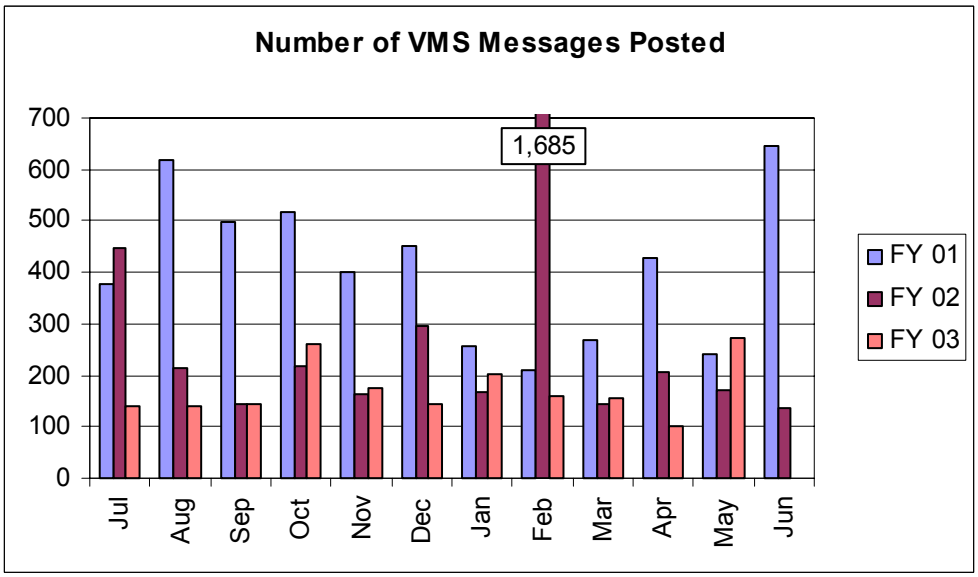


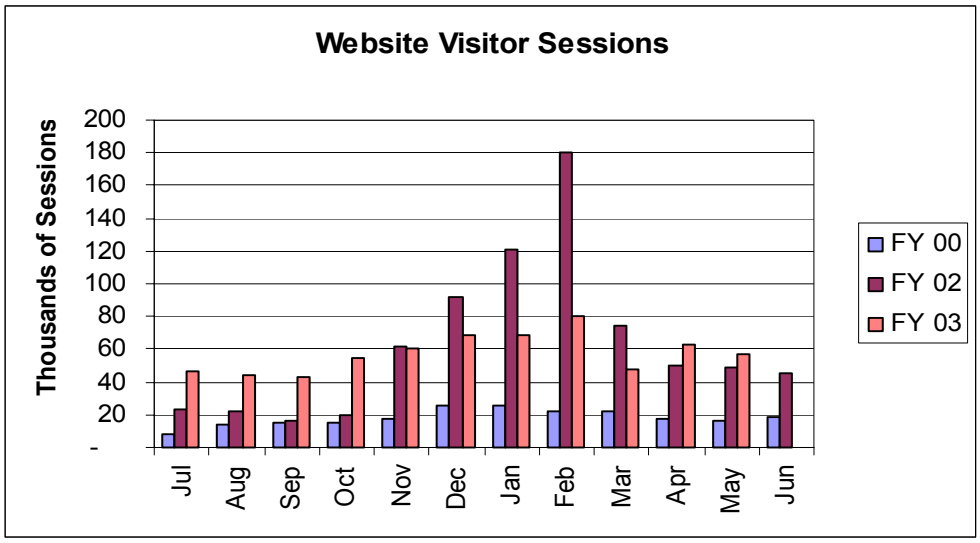


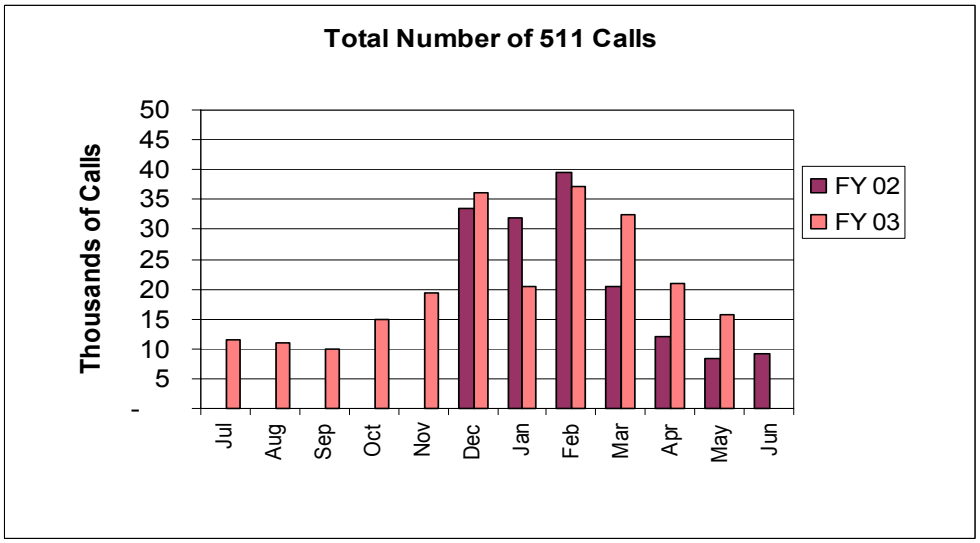




Traveler Information







Customer Service